

IN THE DRAWINGS

Applicants propose to revise the reference numbers in Fig. 3 of the drawings in accordance with the accompanying ANNOTATED SHEET SHOWING CHANGES.

Enclosed herewith is a REPLACEMENT SHEET in which the above changes have been incorporated.

REMARKS

Enclosed herewith is a Substitute Specification in which the specification as filed has been amended in various places to correct typographical and grammatical errors, and to also add section headings.

In support of the above, enclosed herewith is a copy of the specification as filed marked up with the above changes.

The undersigned attorney asserts that no new matter has been incorporated into the Substitute Specification.

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, the claims have been amended for clarity.

Applicants believe that the above changes answer the Examiner's objections to the specification and claims, and respectfully request withdrawal thereof.

The Examiner has rejected claims 1-3 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,764,619 to Nishiuchi et al. The Examiner has further rejected claims 4-9 under 35 U.S.C. 103(a) as being unpatentable over Nishiuchi et al. in view of European Patent Application No. EP1067535A2.

The Nishiuchi et al. patent discloses an optical recording medium having two separate recording layers, in which Example 6 therein (col. 47, line 35 to col. 48, line 67, Fig. 20) discloses an optical information recording medium including a Ge₂Sb₂Te₅ recording thin film. This is a so-called phase change material, in which the depth of the first guide groove is 50 nm (< .15 x 680

nm), and the thickness of the first recording film adjacent the groove is 25 nm while the thickness of the second recording film in the groove is 10 nm (d_{L0L} is substantially equal to or larger than d_{L1G}). Nishiuchi et al. further mentions that the recording layer may be "an organic material, such as a coloring matter, having the spectral reflection factor which is changed" (col. 14, lines 49-51), and that "As the organic coloring matter, a leuco dye, such as triphenylmethane or the like may be employed." (col. 14, lines 64-65).

Applicants however submit that the optical stack design of a medium including a recording layer of such a phase change material is fundamentally different from a medium including a recording layer of an organic dye. This becomes clear from the Substitute Specification on page 2, lines 12-18, which states "However, it has become clear that a fully compatible disk, i.e., within the reflection and modulation specification of the dual-layer DVD-ROM, is very difficult to achieve and requires at least a major breakthrough for the properties of the amorphous/crystalline phase-change materials, which are used as recording layers in, e.g., DVD+RW media."

Applicants believe that a person skilled in the art starting from Nishiuchi et al. and confronted with the problem of how to achieve an optical data storage medium of the type mention in the opening paragraph of the Substitute Specification, which has a reflection level of the L_0 stack and a modulation of recorded

marks in the recording layer of the L₀ recording stack which is compatible with the dual-layer DVD-ROM specification, would not consider changing the phase change material layer to an organic dye layer because this problem is nowhere addressed in Nishiuchi et al.

The Muramatsu et al. patent discloses an information recording medium, in which the depth d₂ (corresponding to the depth of the first L₀ guide groove) is 140 nm (paragraph [0055]).

Applicants therefore submit that while Muramatsu et al. may disclose some of the features of the invention as claimed in claims 4-9, Muramatsu et al. finds it necessary to have a first groove depth of 140 nm, which is greater than 0.15λ as claimed in, for example, claim 1.

In view of the above, Applicants believe that the subject invention, as claimed, is neither anticipated nor rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.

Applicants believe that this application, containing claims 1, 2 and 4-10, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

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